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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,485	03/31/2004	Michael D. Kotzin	CS23908RL	7761

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EXAMINER	
MA, CALVIN	

ART UNIT	PAPER NUMBER
2629	

NOTIFICATION DATE	DELIVERY MODE
11/02/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/814,485	KOTZIN ET AL.	
	Examiner	Art Unit	
	Calvin Ma	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The reference listed on the information disclosure statement filed on 09/30/2004 and 10/18/2006 have been considered. (see attached PTO-1449)

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-16, and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Nykanen et al. (U.S. Patent: 6,714,778)

As to claim 1, Nykanen teaches a method of representing content management in an electronic device (100) having a context sensor (three-axis acceleration sensor 134) (i.e. the content that is on the web server is downloaded back to the device) (see Fig. 3, [0145],[0147]):

receiving signals from a context sensor (touch sensor 124); determining a contextual characteristic of the device based on the received context sensor signals (i.e. the various sensors such as audio, positioning, touch, ambient light, and three-axis acceleration all generate metadata that is then processes by the context inference engine 136) (see Fig.2, [0092], [0106]);

associating the determined contextual characteristic with a data management function of the device (i.e. the recognition result can be used by a health maintenance application program in the wireless device 10, to provide useful and appropriate information to the user, for example by using the touch sensor, fatigue state can be determined to exist) (see Fig.2, Fig.2A, [0116], [0117], [0118]);

and determining a virtual physical representation to be output in response to the execution of the data management function (i.e. health maintenance application can process and recognition result and in response signal alarm to the sensed fatigue (physical condition) in the user, and access database and suggesting medication to palliate the sensed fatigue) (see Fig.2A, [0116], [0117]).

As to claim 10, Nykanen teaches a method of content management in an electronic device (100) comprising (i.e. the wireless device 100 update privacy feature, by updating personal data) (see Fig.1):

selecting data to be transferred, wherein said data is stored in a first device (i.e. the user is enabled to control which application programs in the wireless device 100 are granted access to the user's private context information, and also control context inference server, therefore transmitting only the information that is designated) (see [0019]);

sensing a contextual characteristic of the first device (i.e. the context inference engine has awareness of the user's context) (see [0019]);

establishing a connection (i.e. using Wireless Application Protocol via the cellular network) (see Fig.1) between the first device(100) and a second device (i.e. network server 140) (see Fig.1, [0020]);

transferring the selected data to the second device(see Fig.1, [0019]);

and displaying a virtual representation (health fatigue state) of the sensed contextual characteristic of the device (i.e. the health maintenance application pick up the context interpretation and decide if the fatigue state is reach, if so a warning is made an a suggestion of medication is displayed which will give the user the information of the detection of the fatigue state) (see [0116], [0117]).

As to claim 11, Nykanen teaches a method of executing a command resulting from a sensed gesture in a handheld communication device (100) comprising (i.e. the gesture is what ever movement the user makes that activate [B] RUN AN APPLICATION in the Context Sensitive Service menu Fig.1D) ([0071]-[0092]):

activating a first operation mode of the handheld device (i.e. Context Sensitive Service which refers to the full activation of the context sensors) (see [0071]-[0092]);

receiving input signals from a gesture senor corresponding to a predetermined gesture of the handheld device (i.e. when the user put the wireless device in hand to use, the health maintenance application is triggered to read the state of health or fatigue) (see [0116], [0117]);

executing an algorithm in said portable communication device in response to said command or said sensor measurement meeting a first criteria (i.e. the algorithm is used by the context inference engine 136 to identify the health/fatigue state that the user is in after reading the metadata from the tactile and force sensors) (see [0116], [0117]);

and presenting a virtual representation of a physical principle on a user interface (212) of the device (i.e. the user is alerted the virtual physical state of fatigue and using the display (212), even suggesting a medical remedy to the state) (see [0116], [0117], [0118]).

As to claim 12, Nykanen teaches an electronic device comprising:

a housing (i.e. wireless device 100 by definition is a device that has a housing) (see Fig.1);

a microprocessor (i.e. central processor 210) carried in the housing (100);

a user interface (i.e. display 212) coupled to the microprocessor (210) and carried on the housing (100);

a context characteristic sensor (i.e. touch sensor 124) electrically coupled to the microprocessor (210) (i.e. since the touch sensor exist inside the housing and transmit data to the microprocessor via sensor interface 208, they electrically coupled) (see Fig.2, [0093]);

and a virtual physical representation control module (i.e. motion/gesture Application Program Interface 156) (see Fig.2 [0096]) coupled to the microprocessor (210) and presenting a virtual physical representation (i.e. the state of health or fatigue created in the health maintenance application) to the user interface (i.e. display 212) in response to a signal from the context sensor (i.e. the tactile and force sensors sense the context information and allow the health maintenance application to then assign the state of health or fatigue) (see Fig.2, [0116], [0117], [0118]).

As to claim 2, Nykanen teaches the method of claim 1, further comprising the step of relating the virtual physical representation to the sensed contextual characteristic (i.e. the virtual physical representation of health or fatigue state is directly

linked to the metadata from the touch transducer which is processed and recognized as health or fatigue representation state) (see [0116]).

As to claim 3, Nykanen teaches the method of claim 1, further comprising the step of relating the virtual physical representation to the data management function (i.e. the virtual physical representation of health or fatigue state is directly linked to the database to provide suggestion for medication to palliate the sensed fatigue) (see [0117]).

As to claim 4, Nykanen teaches the method of claim 1, further comprising the step of presenting the virtual physical representation by a user interface of the device (i.e. the virtual physical representation of health or fatigue state is directly linked to the interface of the wireless device 100, as when a recognized fatigue representation state is accompanied by an alarm which is made my the interface to make the user aware of the condition) (see [0117]).

As to claim 5, Nykanen teaches the method of claim 4, further comprising the step of controlling the data management function of the device in response to the context sensor signal (i.e. the detection of virtual physical representation of health or fatigue state is directly linked to the data management function of wireless device 100,

since the access of medical information from the database is required to provide solutions to be sent back to the user as medication suggestion) (see [0117]).

As to claim 6, Nykanen teaches the method of claim 5, further comprising the step of executing a first data management function (access the database on the device 100) of the device (100) in response to receiving the context sensor signal (i.e. touch sensory metadata) and the device operating in a first mode (i.e. accessing the database on the wireless device 100 to determine medication for the condition) (see [0117]), and executing a second data management function (i.e. using the communication network to access the large data base of the server) of the device in response to receiving the context sensor signal (i.e. touch sensory metadata) and the device operating in a second mode (i.e. accessing the server's data base remotely, and access for example the user's allergy reactions to medications, to improve the service provided) (see [0118]).

As to claim 7, Nykanen teaches the method of claim 4, further comprising the step of proportionally executing the data management function (i.e. sampling and digitizing the context sensor input and converting it into useful metadata, since the analog data are continuous they must be proportionally converted to the digital form which has finite scale levels) (see Fig.2, [0092]) of the device in response to the context sensor signal (touch sensor 124) (see Fig.1), and wherein the virtual physical representation is presented proportionally to the execution of the data management

function (i.e. the state of health or fatigue is determined by referencing the degree of response in the tactile, force, temperature sensors that is proportionally processed into data and formed into a statistical model) (see Fig.2, [0115], [0116], [0117]).

As to claim 8, Nykanen teaches the method of claim 1, wherein the context sensor is a light sensor (128) (see Fig.1).

As to claim 9, Nykanen teaches the method of claim 8, wherein the touch sensor is a plurality of touch sensors (i.e. both the tactile sensor and the force sensor have the ability to function as a touch sensor when the user holds the wireless device100) (see [0116]) carried on a housing of the device (i.e. the various types of sensors are physically located on the handset) (see [0095]).

As to claim13, Nykanen teaches the device of claim 12, wherein the device context characteristic sensor (touch sensor 124) selectively provides an input signal to the microprocessor (210) in response to activation of a predetermined contextual characteristic (i.e. the user's in detected by the touch sensor and the tactile and force feedback is interpreted by the microprocessor 210 to create the alarm and medication output on the interface) (see Fig.2, [0117], [0118], [0119]).

As to claim 14, Nykanen teaches the device of claim 13, wherein the context sensor is a temperature sensor (132) (i.e. the tactile sensors signals are outputted and combined with force/temperature input metadata, this means that the temperature sensor is used with touch sensor while determining fatigue state) (see Fig.1, [0115]).

As to claim15, Nykanen teaches the device of claim 13, wherein the virtual physical representation control module generates a virtual representation of a well known physical phenomenon (i.e. weather or not if a person is fatigued or not) that is associated with a context sensed by the context sensor (touch sensor 124) and wherein the virtual physical representation control module (application programs 106) sends the virtual representation to the user interface (i.e. the wireless device sent the user alarm when the context sensors sense the condition of fatigue in the user) (see Fig.2, [0117]).

As to claim 16, Nykanen teaches the device of claim 15, wherein the user interface is a display (212) (i.e. the suggested medication in case fatigue is detected) (see [0117], [0118], [0119]).

As to claim 20, Nykanen teaches the device of claim 12, the virtual physical representation control module (i.e. motion/gesture API 156) is a gesture translation module coupled to the microprocessor (210) and receiving input from the device context characteristic sensor (i.e. touch sensor 124), the virtual physical representation control

module converting motion (i.e. holding the wireless device) of the device into control commands to operate the device (i.e. activating the health maintenance program to create an alarm and suggest medication) (see Fig.2, [0117], [0118], [0119]).

As to claim 21, Nykanen teaches the device of claim 12, wherein the user interface is a display (212), a microphone (i.e. audio sensor125), a keypad (104) (see Fig.1 and Fig.2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nykanen in view of Steele et al. (US Patent: 5,169,342)

As to claim 17, Nykanen teaches the device of claim 16, wherein the virtual representation of a well known physical phenomenon, but does not explicitly teach that

it is a graphical animation presented on the display. Steele teaches the physical phenomenon that is a graphical animation on the display (i.e. the animation shows that the lower container is being filled with a liquid pouring from an upper vessel) (see Fig.13d-13g, Col. 12, lines 9-31). Therefore, it would have been obvious for one of ordinary skill in the art at the time of invention to have included the virtual graphic representation of Steele in the context sensitive device of Nykanen in order to help the device to communicate with a user being conversant in a different language (Steele Col.1, Lines 19-20).

As to claim 18, Nykanen teaches the device of claim 17; Steele teaches wherein the graphical animation presented on the display is a virtual representation of liquid in a container (i.e. the animation shows that the lower container is being filled with a liquid pouring from an upper vessel) (see Fig.13d-13g, Col. 12, lines 28-31).

As to claim 19, Nykanen teaches the device that is able to sense gesture based on a context sensor (i.e. the wireless device has Motion/Gesture API 156 that uses the data from context inference engine 136) (see Fig.2). Steele teaches wherein the virtual representation of a liquid in a container is an animation of the liquid emptying from the container in response to sensing a pouring gesture made with the device (i.e. the icon is activated by clicking the arrow cursor (input from the user) on it, which than activate the pouring animation) (see Fig.13d-13g, Col. 12, lines 26-31). Therefore, the combination

of Nykanen's sensing the gesture of the user via the context sensor, and Steele's graphical representation of liquid animation after the user makes an input reads on the claim.

Response to Arguments

1. Applicant's arguments filed August 14, 2007 have been fully considered but they are not persuasive.

First the applicant argues with respect to claim 1, the Nykanen, et al. does not teach virtual physical representation to be output in response to the execution of the data management.

The examiner disagrees in that Nykanen teaches the construction of a virtual physical representation of a health or fatigue state for the user, after the digitized signal of the transducer is analyzed and processed into metadata vector. This is an equivalent concept with the applicant's display of the cup, as a representation of a state based on characteristic of reality apparent to the user (i.e. fatigue of the body and the pouring of water), which is a type of virtual physical representation that is outputted to the user in response to the execution of data management function (i.e. metadata recognition matching pre-existing parameters) (see Nykanen [0116], [0117], [0118]).

The applicant also argues with respect to claim 10, that Nykanen does not teach selecting data to be transferred, wherein said data is stored in a first device, establishing a connection between the first device and a second device, and displaying a virtual representation of the sensed contextual characteristic of the device.

The examiner disagrees on the above point, Nykanen clearly teaches selecting the sensed virtual representation of health status to a server computer from the portable unit of the user, thereby suggesting medications to palliate the fatigue. Since the detection of the virtual representation must be first stored on to the wireless portable device, therefore, the connection with the server's database is inherently wireless in nature. After the database respond to the quarry, a suggested medication is then displayed on the wireless device which is showing the virtual representation of fatigue and a way to improve such symptom in the medication (see Nykanen [0116], [0117], [0118]).

The applicant further argues with respect to claim 11, that Nykanen does not teach activating a first operation mode of the handheld device, receiving input signals from a gesture sensor corresponding to a predetermined gesture of the handheld device, executing an algorithm in said portable communication device in response to said command or said sensor measurement meeting the first criteria; and presenting a virtual representation of a physical principle on a user interface.

The examiner disagree with the above argument in that Nykanen teaches at least of a training mode and a recognition mode for the device. Since the user has the functionality of medical monitoring, the recognition mode must be activating on the device (see Nykanen [0115], [0116]). Since the medical monitoring requires the use of the tactile sensor from the gesture of user contacting the device. This gesture must be recognized for the sensor to receive the necessary input sensory signal. This contact can be the user holding the device, which is natural way for device interaction, which is a physical gesture by the user. After the device activate the monitoring application to process the present sensory input and create a metadata vector. An algorithm must be used in order to complete the comparisons of the metadata vector and the standard statistical model. Where the likely match is then inferred touch recognition result. This result is the virtual representation of physical fatigue of the lack there of. Since the user is giver a prompt toward the need of medication for fatigue, this is the display of the virtual physical representation of fatigue for the user (see Nykanen [0116], [0117]).

Finally the applicant argues with respect to claim 12, that Nykanen does not teach virtual physical representation control module nor presenting a virtual physical representation to the user interface in response to a signal from the context sensor.

The examiner disagree with the above argument in that Nykanen teaches a virtual physical representation control module (i.e. motion/gesture Application Program

Interface 156) in the memory of the device 202 (see Fig.2 [0096]) coupled to the microprocessor (210) and presenting a virtual physical representation (i.e. the state of health or fatigue created in the health maintenance application) to the user interface (i.e. display 212) in response to a signal from the context sensor (i.e. the tactile and force sensors sense the context information and allow the health maintenance application to then assign the state of health or fatigue) (see Fig.2, [0116], [0117], [0118]). Since the device reply upon the user input of touch and the context touch sensor is able to interact with the memory 202 and microprocessor 210 to communicate with server to return a useful suggestion of medication for the detect virtual representation of user's current fatigue state.

Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Calvin Ma whose telephone number is (571) 270-1713. The examiner can normally be reached on Monday - Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Calvin Ma

October 26, 2007

CHANH D. NGUYEN
SUPERVISORY PATENT EXAMINER